

ABSTRACT OF THE DISCLOSURE

5 A process for the reduction of the level of a component in a feed gas such as air
involving passing the gas to at least three parallel thermal swing adsorption zones
charged with an adsorbent and operating according to an adsorption cycle. The cycle of
each zone is phased with respect to that of the other zones so that at any point during
the cycle, the number of zones in the adsorption step is greater than the number of
zones not in the adsorption step. Thermal swing adsorption apparatus having at least
10 three parallel thermal swing adsorption zones and means for controlling the flow of the
feed gas through the zones such that each bed undergoes repeated cycles which are out
of phase with the cycles for the other vessels provided that, in use, at least two vessels
are in the adsorption step at any time.

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